Claims

1. A communication arrangement for information transfer over at least one transmission line (UL) to which there is connected at least one transmission unit (LD), in each case having an active or passive operating state, for sending and/or receiving information with an input impedance (Z_{xDSL}) dependent on the current operating state,
characterized in that

- sensing means (EE) for detecting the current operating state of the transmission unit (LD) are provided,
- impedance means (S, Z_{Syn}) assigned to the sensing means (EE) are provided, by means of which at least one switchable electrical component (Z_{Syn}) is connected as a function of the detected operating state in such a way that the input impedance (Z_{xDSL}) of the at least one transmission unit (LD) is kept to an approximately constant value.

2. The communication arrangement as claimed in claim 1,
characterized in that
the transmission unit (LD) comprises at least two operational amplifiers (OP1,2) transmitting the information to be transferred onto the at least one transmission line (UL), the at least one electrical component (Z_{Syn}) is switched between outputs (AO) of the two operational amplifiers (OP1,2) via a switch (S) controlled by the sensing means (EE), with the impedance means (S, Z_{Syn}) and the sensing means (EE) being embodied in such a way that the switch (S) is open in the active operating state and closed in the passive operating state.

3. The communication arrangement as claimed in claim 1 or 2,
characterized in that

the at least one electrical component comprises at least one electrical resistor (Z_{Syn}).

4. The communication arrangement as claimed in one of the preceding claims,
characterized in that
the transmission unit (LD) for sending and/or receiving information is embodied in accordance with an xDSL transmission method.

5. The communication arrangement as claimed in one of the preceding claims,
characterized in that
at least one further transmission unit for sending and/or receiving information embodied in accordance with the ISDN transmission method is connected to the at least one transmission line (UL).

6. The communication arrangement as claimed in one of the preceding claims,
characterized in that
the sensing means (EE) are embodied in such a way that activation signals transmitted over the at least one transmission line (UL) are detected,
the sensing means (EE) are embodied in such a way that when an activation signal is detected the active operating state of the transmission unit (LD) is established.

7. The communication arrangement as claimed in claim 6,
characterized in that
the activation signals are embodied as wake-up signals in accordance with the ITU-T G.922 standard.

8. A transmission unit (LD) for sending and/or receiving information over at least one connectable transmission line (UL), with the transmission unit (LD) having an active or passive operating state and an input impedance (Z_{xDSL}) dependent on the current operating state,
characterized in that
sensing means (EE) for detecting the current operating state of the transmission unit (LD) are provided,
impedance means (S, Z_{Syn}) assigned to the sensing means (EE) are provided, by means of which at least one switchable electrical component (Z_{Syn}) is connected as a function of the detected current operating state in such a way that the input impedance (Z_{xDSL}) of the transmission unit (LD) is kept to an approximately constant value.

9. The transmission unit as claimed in claim 8,
characterized in that
at least two operational amplifiers (OP1,2) transmitting the information to be transmitted onto the at least one transmission line (UL) are disposed,
the at least one electrical component (Z_{Syn}) is switched between outputs (AO) of the two operational amplifiers (OP1,2) via a switch (S) controlled by the sensing means (EE), with the impedance means (S, Z_{Syn}) and the sensing means (EE) being embodied in such a way that the switch (S) is open in the active operating state and closed in the passive operating state.

10. The transmission unit as claimed in claim 8 or 9,
characterized in that
the at least one electrical component comprises at least one electrical resistor (Z_{Syn}).

11. The transmission unit as claimed in one of the claims 8 to 10,

characterized in that
the transmission unit (LD) for sending and/or receiving information is embodied in accordance with an xDSL transmission method.

12. The transmission unit as claimed in one of the claims 8 to 11, **characterized in that**
the sensing means and the impedance means are embodied as an external circuit arrangement which can be connected to the transmission unit (LD).

13. A circuit arrangement for external connection to a transmission unit according to one of the claims 8 to 12, **characterized in that**
impedance means (S, Z_{Syn}) which can be connected to the sensing means (EE) disposed in the transmission unit are provided, which impedance means (S, Z_{Syn}) are embodied in such a way that at least one switchable electrical component is connected as a function of the detected operating state in such a way that the input impedance (Z_{xDSL}) of the transmission unit (LD) is kept to an approximately constant value with the aid of at least one switchable electrical component (Z_{Syn}) as a function of the detected current operating state.

14. The circuit arrangement as claimed in claim 13, **characterized in that**
the sensing means (EE) are comprised by the circuit arrangement.